



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22315-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/486,821	03/02/2000	ANTTI TOSKALA	PM257637	1198

7590 02/17/2004  
PILLSBURY WINTHROP LLP  
1600 TYSON BOULEVARD  
McLEAN, VA 22102

EXAMINER
----------

NGUYEN, BRIAN D

ART UNIT	PAPER NUMBER
----------	--------------

2661

DATE MAILED: 02/17/2004

15

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/486,821

Applicant(s)

TOSKALA ET AL.

Examiner

Brian D Nguyen

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-56 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-56 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-15, 17-40, and 42-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allpress et al (5,920,552) or Sato (6,130,884) in view of Longoni et al (6,631,125).

Regarding claims 1-15 and 17-25, Allpress and Sato disclose a method for transmitting data from a radio network subsystem to user equipment comprising transmitting a dedicated control channel and a dedicated traffic channel of variable data rate to the user equipment, the spreading code used to spread the traffic channel is changed according to the required data transmission rate, wherein the control channel and traffic channel frames associated with each other are transmitted on the same frequency, spread with a different spreading code, and separated by one frame length at most (see abstract; col. 3, line 66-col. 4, line 3; and col. 6, lines 9-16 of Allpress) (see abstract; col. 1, lines 5-12; and col. 4, lines 16-28 of Sato). Allpress and Sato do not specifically disclose each control channel frame indicates the spreading code with which the corresponding traffic channel frame is spread when transmitted, wherein the control channel frame comprises a transport format indicator. However, control channel frame indicates the spreading code with which the corresponding traffic channel frame is spread when transmitted is well known in the art. Longoni discloses each control channel frame indicates the spreading code with which the corresponding traffic channel frame is spread when transmitted,

Art Unit: 2661

wherein the control channel frame comprises a transport format indicator (see figure 1; col. 5, lines 42-52 ). Therefore, it would have been obvious to those of ordinary skill in the art at the time the invention was made to indicate the spreading code in each control channel frame as taught by Longoni in the system of Allpress or Sato so that the user equipment can use the spreading code to decode the received signals.

Regarding claims 26-40 and 42-50, claims 26-40 and 42-50 are system claims that have substantially all the limitations of the respective method claims 1-15 and 17-25, thus is subject to the same rejection.

Regarding claims 51-56, claims 51-56 are user equipment claims that have substantially all the limitations of the respective method claims 1-15 and 17-25, thus is subject to the same rejection.

3. Claims 16 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allpress et al (5,920,552) or Sato (6,130,884) in view of Longoni et al (6,631,125) as applied to claims 1 and 26 above, and further in view of Ovesjo et al (6,542,484).

Regarding claims 16 and 41, Allpress or Sato in view of Longoni disclose all the claimed subject matter as described in previous paragraph except for when the sub-code tree becomes congested, the user equipment can be transferred to another sub-code tree. However, Ovesjo discloses when the sub-code tree becomes congested (run out of code), the user equipment can be transferred to another sub-code tree (use code from the second code set) (see col. 3, lines 47-58 and col. 5, lines 33-36). Therefore, it would have been obvious to those of ordinary skill in the art at the time the invention was made to transfer the user equipment to another sub-code tree as

Art Unit: 2661

taught by Ovesjo in the system of Allpress or Sato in view of Longoni so that service disruption can be avoided when congestion occurs.

#### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-56 have been considered but are moot in view of the new ground(s) of rejection.

The applicant argued that Longoni merely teaches on the subject of technology and methodology useful for uplink while the claimed invention is directed to technology and methodology for downlink. The examiner agrees. The new reference, Longoni et al, is clearly directed to technology and methodology for downlink as the claimed invention.

#### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D Nguyen whose telephone number is (703) 305-5133. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Brian Nguyen', with a stylized, flowing script.

Brian Nguyen  
2/9/04